

REMARKS

The above amendments to the above-captioned application along with the following remarks are being submitted as a full and complete response to the Office Action dated March 1, 2005. In view of the above amendments and the following remarks, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

Status of the Claims

As outlined above, claims 25 – 45 currently stand for consideration, wherein claim 25 is being amended to correct formal errors and to more particularly point out and distinctly claim the subject invention. It is submitted that no new matter is being introduced into the application through the submission of this response.

Formal Objections or Rejections

Claims 28, 30, 32 and 35 were rejected under 35 USC §112, second paragraph, for reciting elements lacking proper antecedent basis, while claim 27 was objected to for a minor informality. The claims are being amended in accordance with the Examiner's requirements. Based on the above, withdrawal of the above objection is respectfully requested.

Prior Art Rejections

Claims 25, 27, 28 and 34 – 37 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,325,821 B1 to Gaschinko et al.

Further, claims 26 and 45 were rejected under 35 U.S.C. §103(a) as being obvious in view of Gaschinko '821 in view of U.S. Patent No. 6,461,380 to Cox.

Lastly, claims 38 – 44 were rejected under 35 U.S.C. §103(a) as being obvious in view of Gaschinko '821 in view of U.S. Patent No. 6,273,913 to Wright et al.

The present invention as recited in amended claim 25 is directed to a radially expandable intraluminal vascular support comprises a plurality of coupled flexible zigzag formed annular elements formed by straight bars of equal length and connected by arch portions therebetween, the zigzag annular elements being ordered vertically along a longitudinal axis, the zigzag formed annular elements define a proximal end and a distal end of the intraluminal vascular support, wherein in a non-expanded state each zigzag annular element is coupled to at least one other annular element through at least one opposing pair of

bending elements, each of the bending elements being formed from a bow shaped connector bar connected between arch portions of adjacent zigzag annular elements, wherein portions of said adjacent zigzag annular elements and said bow shaped bars connected therebetween are arranged to form corresponding star shaped segments.

Among the main features of the invention, the radially expandable intraluminal vascular support comprises stents with star shaped bending elements in a non-expanded state. The stent of the present application in the non-expanded state allows the opening to be widely opened at the site of the stent when in a fully expanded state and allows the branch exits of the vessel system to stay completely opened. The highly flexible stent of the present invention can easily be bent in curved vessels in a collapsed state. In addition, applicants would submit that the star shaped elements of the invention allow for high flexibility, high permeability and high radial stability in the fully expanded state.

Unlike the present invention, Gaschinko '821 shows in its Figure 3 a stent having zigzag annular elements in the expanded state. These zigzag formed annular elements are connected by bridges 3 that have extensions 3A. This reference simply does not show or suggest any bow shaped elements. Moreover, the connecting elements of Gaschinko '821 are not attached to the arches of the zigzag formed annular elements, as in the present invention, but rather to the centers of the straight bars of the successive segments 2 which form zigzag annular elements only in an expanded state. There are no zigzag shaped elements in a non-expanded state as shown by Figure 2.

Regarding Cox '380 and Wright '913, as noted above, the present invention as claimed is distinguishable from the primary reference of Gaschinko '821. Each of the secondary references noted above are merely cited for features recited in the dependent claims, and by themselves fall far short of providing any disclosure or suggestion that would make up for the deficiencies in Gaschinko '821.

As explained in the previous response, the reference of Cox '380 shows a stent in its production state (See col. 2, lines 22 to 28). This stent has serpentine annular elements connected by connected by bow shaped connecting elements, wherein the straight bars of the serpentine elements have different length. Cox '380 does not disclose or suggest any zigzag, annular elements nor any star-shaped segments in a non-expanded state. In fact, as evidenced by Figure 3 of Cox '380, this reference could not show or suggest star shaped elements because two serpentine elements connected by a bow shaped element touch each other such that the remaining open segment resembles a bar.

Wright '913 discloses a stent with struts having a generally uniform thickness and no particular shape for the annular elements or for the connection bars is specified.

Neither Gaschinko '821 nor Cox '380 nor Wright '913 provides any disclosure, teaching or suggestion to anticipate or render obvious the present invention as claimed. Further, neither reference provides any disclosure, teaching or suggestion to motivate their combination so as to embody the claimed invention. Rather, even if any or all of these references were combined, their combination would still fall short of showing or suggesting every feature of the invention as explained above. Consequently, the present invention as now claimed is distinguishable and thereby allowable over Gaschinko '821, Cox '380 and Wright '913.

In view of the foregoing, Applicants respectfully submit that none of the cited references discussed above, either by themselves or in combination with one another, can render each and every feature of the present invention as claimed obvious to one of skill in the art. As a result, the present invention as a whole is allowable over all the prior art references cited.

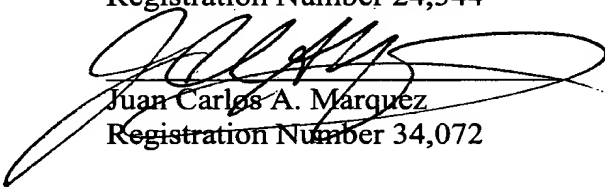
Conclusion

In view of all the above, Applicants respectfully submit that certain clear and distinct differences as discussed exist between the present invention as now claimed and the prior art references upon which the rejections in the Office Action rely. These differences are more than sufficient that the present invention as now claimed would not have been anticipated nor rendered obvious given the prior art. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application as amended is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicant's undersigned representative at the address and phone number indicated below.

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